

IN THE CLAIMS:

1. A substrate for a liquid crystal display comprising at least a transparent substrate and a columnar spacer formed on the transparent substrate, wherein the substrate for a liquid crystal display is ~~characterized in that~~ a following amount of an initial deformation A obtained by measuring the columnar spacer by a following measurement method is $0.04\ \mu\text{m}$ or more, and a following amount of a plastic deformation B is $0.7\ \mu\text{m}$ or less[.]:

measurement method: a compression load is applied in a axial direction of the columnar spacer up to 80 mN at a load applying speed of 22 mPa/sec and that state is maintained for 5 seconds[.]; ~~Thereafter~~ thereafter, a load is removed down to 0 mN at a load removing speed of 22 mPa/sec, and that state is maintained for 5 seconds[.],

amount of initial deformation A: an amount of a compression deformation obtained by $X - Y$ assuming that an initial height of the columnar spacer is X , and a height when a load F (mN) obtained by a following formula (1) is applied during an above load application is Y [.]:

$$F = 19.6/n \quad (1)$$

($10 \leq n \leq 50$, n is a density of a number of columnar spacers (pieces/mm²)),

amount of plastic deformation B: an amount of a residual deformation obtained by $X - Z$ assuming that the initial height of the columnar spacer is X and a height after removing the load and maintaining that state for 5 seconds is Z .

2. The substrate for a liquid crystal display according to claim 1, ~~characterized in that~~ wherein a following elastic deformation ratio C is 60% or more[.]:

elastic deformation ratio C: a deformation ratio obtained by $[(Z - W) / (X - W)] \times 100$ assuming that the initial height of the columnar spacer is X ; a height after applying a load of 80 mN and maintaining for 5 seconds is W ; and a height after removing the load and maintaining for 5 seconds is Z .

3. The substrate for a liquid crystal display according to claim 1 ~~characterized by~~ being used in a liquid crystal display of 17 inches or more.
4. The substrate for a liquid crystal display according to claim 2 ~~characterized by~~ being used in a liquid crystal display of 17 inches or more.
5. A substrate for a liquid crystal display having at least a transparent substrate and a columnar spacer formed on the transparent substrate and being used in a liquid crystal display of 17 inches or more, the substrate for a liquid crystal display ~~being characterized in that~~ having a density of a number of the columnar spacers is within a range from 15 pieces/mm² to 50 pieces/mm².
6. A liquid crystal display ~~characterized by having~~ wherein the substrate for a liquid crystal display according to claim 1.
7. A liquid crystal display ~~characterized by having~~ wherein the substrate for a liquid crystal display according to claim 2.
8. A liquid crystal display ~~characterized by having~~ wherein the substrate for a liquid crystal display according to claim 3.
9. A liquid crystal display ~~characterized by having~~ wherein the substrate for a liquid crystal display according to claim 4.